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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,645	07/30/2002	Benzion Landa	UEI	3202
26418	7590	06/10/2004	EXAMINER	
REED SMITH, LLP ATTN: PATENT RECORDS DEPARTMENT 599 LEXINGTON AVENUE, 29TH FLOOR NEW YORK, NY 10022-7650			WILLIAMS, KEVIN D	
			ART UNIT	PAPER NUMBER
			2854	

DATE MAILED: 06/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/089,645	LANDA ET AL.	
	Examiner	Art Unit	
	Kevin D. Williams	2854	<i>aw</i>

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 29-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 14-16 and 29-34 is/are rejected.
- 7) ☒ Claim(s) 8-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/24/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 14, 29, and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Helmstadter (US 6,038,976).

Helmstadter teaches an apparatus for duplex printing comprising a first impression roller 11 on which a first side of a sheet having a leading edge and a trailing edge is printed referenced to the leading edge, a second impression roller 11 on which a second side of the sheet is printed, a transport system 15,16,17 that removes a printed sheet from the first impression roller and transports it to the second impression roller, the transport system comprising a perfecter 16 including an element rotating about an axis, the element receiving the sheet and gripping the sheet simultaneously along both the leading and trailing edges thereof (col. 7, lines 28-31), which rotating element turns the sheet over and transfer the sheet, trailing edge first (col. 7, lines 9-11), towards the second impression roller 11, the perfecter transferring the sheet with the trailing edge registered to the leading edge, the perfecter comprising a first array of

Art Unit: 2854

grippers 21 that grips the sheet adjacent the leading edge and a second array of suction cups 23 that grips the sheet adjacent the trailing edge, the distance between the gripper and suction cup arrays being adjustable to accommodate different size sheets (col. 8, lines 30-36), the perfector comprising a shaft (shaft shown at center of 16 in Fig. 1) to which the arrays of grippers and suction cups are mounted, and the perfector comprising at least one sheet support surface (outer surface of 16) on which the sheet lies when it is held by the perfector.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helmstadter in view of Umezawa (US 4,660,825).

Helmstadter teaches the claimed invention except for the perfector having a first array of suction cups that grip the sheet adjacent the leading edge, the first and second arrays of suction cups being respectively connected via first and second internal channels in the shaft to at least one vacuum system that controls aspiration of suction cups in the arrays, the first and second channels respectively having first and second orifices on the surface of the shaft and wherein the first orifice is displaced from the second orifice along the axis of the shaft.

Art Unit: 2854

Umezawa teaches a roller 20 having a first array of suction cups 36 that grip the sheet adjacent the leading edge, the first 36 and second 52 arrays of suction cups being respectively connected via first 77b and second 98A internal channels in the shaft to at least one vacuum system that controls aspiration of suction cups in the arrays, the first and second channels respectively having first (near 82, Fig. 10) and second (near 82A, Fig. 10) orifices on the surface of the shaft and wherein the first orifice is displaced from the second orifice along the axis of the shaft.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Helmstadter to have the first array of suction cups and the channel arrangement in the shaft as taught by Umezawa, in order to minimize the mechanical operation of the system, which in effect reduces the number of moving parts.

5. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Helmstadter in view of Haas (US 5,598,779).

Helmstadter teaches the claimed invention except for a fan that creates airflow that presses the sheet flat to the at least one sheet support surface.

Haas teaches a fan 20 that creates airflow that presses the sheet flat to an at least one sheet support surface.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Helmstadter to have a fan as taught by Haas, in order to aid in holding the sheet to the surface of the perfecter.

6. Claims 16, 31, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helmstadter in view of Ruetschle (US 3,884,146).

Helmstadter teaches the claimed invention except for the perfector rotating in a first direction when removing the sheet from a preceding roller and rotating in an opposite direction when it passes off the sheet to a following roller.

Ruetschle teaches an apparatus having a perfector 29 rotating in a first direction when removing the sheet from a preceding roller and rotating in an opposite direction when it passes off the sheet to a following roller (col. 5, lines 27-32).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Helmstadter to have the perfector as taught by Ruetschle, in order to utilize a smaller perfector which holds one sheet at a time, thus providing more space in the press for other components.

7. Claims 33 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helmstadter in view of Becker (US 6,098,543).

Helmstadter teaches the claimed invention and a second rotating element 17 that receives the sheet from the element of the perfector and grips the originally trailing and presently leading edge of the sheet utilizing pinching grippers 19, but does not teach the utilization of suction grippers.

Becker teaches the utilization of suction grippers 6 on a second rotating element that receives a sheet from the element of a perfector and grips the originally trailing and presently leading edge of the sheet.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Helmstadter to have the suction grippers as taught by Becker, in

Art Unit: 2854

order to ensure the reliable guidance of different types of printing substrates, as taught by Becker (col. 2, lines 54-56).

Allowable Subject Matter

8. Claims 8-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the indication of the allowability of claim 8 is the limitation of first, second, and third annular bearings mounted to the shaft, wherein each bearing has an inner and outer race that sandwiches a plurality of rollers and a grease seal providing a seal between the inner and outer race, in combination with the other claimed structure.

Response to Arguments

9. Applicant's arguments filed 3/24/2004 have been fully considered but they are not persuasive.

Applicants' argue that the perfecter 16 in Helmstadter does not turn the sheet over and transfer the sheet trailing edge first towards the second impression roller. The examiner contends that the perfecter 16 does turn the sheet over and transfer the sheet trailing edge first towards the second impression roller. In the instant application, the perfecter holds a sheet on its surface with gripping devices. The perfecter then merely rotates, with the sheet flat against the surface of the perfecter, to a point where the

Art Unit: 2854

trailing edge of the sheet is at the nip between the perfecter and the second rotating element (34 in the appl.). The second rotating element then grabs the trailing edge of the sheet and pulls the sheet off of the perfecter. Applicants recite the above functions of the perfecter and the second rotating element in the claims as "turning the sheet over and transferring the sheet trailing edge first towards the second impression roller."

Helmstadter performs the recited functions exactly. In Helmstadter, the perfecter 16 holds a sheet on its surface with gripping devices. The perfecter 16 then rotates, with the sheet on its surface, to a point where the trailing edge of the sheet is at the nip between the perfecter and a second rotating element 17. See column 7, lines 9-11. The second rotating element then grabs the trailing edge of the sheet and pulls the sheet off of the perfecter.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

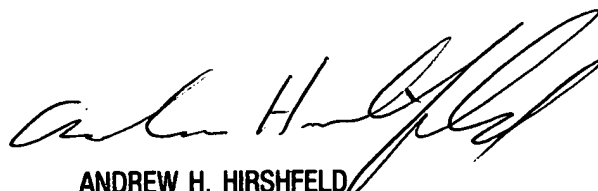
Art Unit: 2854

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin D. Williams whose telephone number is (571) 272-2172. The examiner can normally be reached on Monday - Friday, 8:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H. Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KDW
May 19, 2004



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